Application No.: 09/856,236

Office Action Dated: January 8, 2004

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-11 (canceled)

12. (previously presented) A composition comprising:

(a) at least one water-soluble or water-dispersible polymer; and

(b) at least one filler comprising WDP gypsum particles obtained from waste-

gas desulphurization and having a mean particle diameter ranging from about 13 µm to 500

µm as determined by the Fraunhofer diffraction technique.

13. (previously presented) The composition of claim 12, wherein the mean diameter

of the WDP gypsum particles ranges from about 30 μm to 250 μm.

14. (previously presented) The composition of claim 13, wherein the filler further

comprises at least one other type of inorganic filler particles in addition to the WDP gypsum

particles.

15. (previously presented) The composition of claim 14, wherein the other type of

filler comprises chalk, titanium dioxide, barium sulfate, silica flour, silica gel, dolomite, or

kaolin or mixtures thereof.

16. (previously presented) The composition of claim 15, wherein the water-soluble

or water dispersible polymer is polyurethane, polyacrylate, polymethacrylate, polyvinyl ester,

polystyrene, polybutadiene, polyamide, polyester, polyvinyl chloride, ethylene/vinyl acetate

copolymer, styrene/butadiene copolymer, styrene/acrylonitrile polymer, styrene/acrylate

copolymer or a mixture thereof.

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17. (previously presented) The composition of claim 16, wherein the filler is present

in the composition in a total amount of at least 40 weight percent, based on the total weight of

the composition.

18. (previously presented) The composition of claim 17, wherein the composition

comprises from 50 weight percent to 99 weight percent of filler, from 1 weight percent to 50

weight percent of water-soluble or water dispersible polymer, and up to 49 percent by weight

of water.

19. (previously presented) The composition of claim 12, wherein the filler includes

at least one of chalk, titanium dioxide, barium sulfate, silica flour, silica gel, dolomite, kaolin

or mixtures thereof.

20. (previously presented) The composition of claim 12, wherein the water-soluble

or water dispersible polymer is polyurethane, polyacrylate, polymethacrylate, polyvinyl ester,

polystyrene, polybutadiene, polyamide, polyester, polyvinyl chloride, ethylene/vinyl acetate

copolymer, styrene/butadiene copolymer, styrene/acrylonitrile polymer, styrene/acrylate

copolymer or mixtures thereof.

21. (previously presented) The composition of claim 12 wherein the composition is a

surface coating, a surfacing composition, a sealing composition, an adhesive, or a molding

composition.

22. (previously presented) A process for preparing a polymer-containing

composition comprising combining in any order one or more water-soluble or water-

dispersible polymers with filler particles, wherein the filler particles comprise WDP gypsum

particles that are obtained from waste-gas desulphurization and have a mean particle diameter

ranging from 13 µm to 500 µm as measured by the Fraunhofer diffraction technique.

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23. (previously presented) The process of claim 22 wherein the filler particles comprise a mixture of the WDP gypsum particles and at least one other type of inorganic filler particles.

- 24. (previously presented) The process of claim 22 wherein the water-soluble polymers or water-dispersible polymers are in an aqueous dispersion prior to the combination with the filler particles.
- 25. (previously presented) The process of claim 22 wherein the polymer-containing composition is in the form of a solid powder, a paste, an aqueous dispersion, or a non-aqueous liquid.
- 26. (previously presented) The process of claim 22 wherein water or one or more other additives, or combinations thereof are combined in any order with the polymers and filler particles to form the polymer-containing composition.
- 27. (previously presented) The process of claim 22 wherein the polymer-containing composition is a polymer dispersion and wherein the filler particles comprise at least one other type of inorganic filler particles and the WDP gypsum particles have a mean particle diameter ranging from about 30 μ m to 250 μ m.
- 28. (previously presented) A process for preparing a surface coating, a surfacing compound, a sealing compound, an adhesive, or a molding composition comprising combining one or more water-soluble or water-dispersible polymers with WDP gypsum particles wherein the WDP gypsum particles are obtained from waste-gas desulphurization and have a mean particle diameter ranging from about 13 μ m to 500 μ m as measured by the Fraunhofer diffraction technique.
- 29. (previously presented) The process of claim 28 wherein the mean particle diameter of the WDP gypsum particles ranges from about 30 μ m to 250 μ m.

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30. (previously presented) A surface coating, a surfacing compound, a sealing compound, an adhesive, or a molding composition prepared by the process of claim 28.

- 31. (new) The composition of claim 12 wherein the WDP gypsum particles have a mean particle diameter ranging from about 40 to 120 µm.
- 32. (new) The composition of claim 12 wherein the WDP gypsum particles have a mean particle diameter ranging from about 80 to $100 \mu m$.
 - 33. (new) An article comprising:
 - (a) a substrate; and
 - (b) a coating comprising:
 - (i) at least one water-soluble or water-dispersible polymer; and
- (ii) at least one filler comprising WDP gypsum particles obtained from waste-gas desulphurization and having a mean particle diameter ranging from about 13 μ m to 500 μ m as determined by the Fraunhofer diffraction technique;

the coating being applied to at least one side of the substrate.

- 34. (new) The article of claim 33 wherein the water-soluble or water dispersible polymer is polyurethane, polyacrylate, polymethacrylate, polyvinyl ester, polystyrene, polybutadiene, polyamide, polyester, polyvinyl chloride, ethylene/vinyl acetate copolymer, styrene/butadiene copolymer, styrene/acrylonitrile polymer, styrene/acrylate copolymer or mixtures thereof.
- 35. (new) The article of claim 34 wherein the mean diameter of the WDP gypsum particles ranges from about 30 μ m to 250 μ m.
- 36. (new) The article of claim 33 further comprises at least one other type of inorganic filler particles in addition to the WDP gypsum particles.

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37. (new) The article of claim 36, wherein the other type of filler comprises chalk, titanium dioxide, barium sulfate, silica flour, silica gel, dolomite, or kaolin or mixtures thereof.

- 38. (new) The article of claim 37, wherein the filler is present in the composition in a total amount of at least 40 weight percent, based on the total weight of the composition.
- 39. (new) The article of claim 38, wherein the composition comprises from 50 weight percent to 99 weight percent of filler, from 1 weight percent to 50 weight percent of water-soluble or water dispersible polymer, and up to 49 percent by weight of water.
- 40. (new) The article of claim 33, wherein the filler includes at least one of chalk, titanium dioxide, barium sulfate, silica flour, silica gel, dolomite, kaolin or mixtures thereof.
- 41. (new) The article of claim 33, wherein the water-soluble or water dispersible polymer is polyurethane, polyacrylate, polymethacrylate, polyvinyl ester, polystyrene, polybutadiene, polyamide, polyester, polyvinyl chloride, ethylene/vinyl acetate copolymer, styrene/butadiene copolymer, styrene/acrylateire polymer, styrene/acrylateire copolymer or mixtures thereof.